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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,421	09/08/2003	Jordan Cohen	112855.122 ( US2)	9023
23483 7590 03/24/2008 WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109				
EXAMINER SHAH, PARAS D				
ART UNIT		PAPER NUMBER		
2626				
NOTIFICATION DATE		DELIVERY MODE		
03/24/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/657,421

**Applicant(s)**

COHEN ET AL.

**Examiner**

PARAS SHAH

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is in response to the Pre-Appeal Brief filed on 01/18/2008. Claims 1-4 and 6-14 remain pending, where the determination was made to reopen prosecution. The Applicants' remarks have been carefully considered, but they do not place the claims in condition for allowance. Accordingly, this action has been made FINAL. The final was necessitated by amendment based on the previous Amendments to the claims that were filed on 05/24/2007. Hence, the prosecution has been reopened at this point in time, before the mailing of the Final Rejection dated 07/18/2007.
2. All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

### ***Response to Arguments***

3. Applicant's arguments (pages 1-5) filed on 01/18/2008 with regard to claims 1-4 and 6-14 have been fully considered but they are moot in view of new grounds for rejection.

### ***Response to Amendment***

4. Applicants' amendments filed on 05/29//2007 have been fully considered. The newly amended limitations in claims 1 and 9 necessitate new grounds of rejection. The prior art reference by Cameron (WO 02/097590) has been applied to teach the "handheld device" as found in [0061] (e.g. portable is synonymous to handheld).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6-7, 9-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marasek *et al.* (EP 1 271 469) in view of Meredith (US 5,796,916, issued on 08/18/1998) in view of Lumelsky (US 6,081,780, issued on 06/27/2000) in view of Cameron (WO 02/097590 A, published on 12/05/2002).

As to claims 1, 9, and 13, Marasek teaches a method and system for speech synthesis comprising:

receiving a spoken utterance (see Abstract Figure 1, S1, receive speech input S1) (e.g. It is obvious that a microphone is used to input speech in the system.);

extracting one or more prosodic parameters (see Figure 1, S21m, extract prosodic features) (e.g. It is obvious that a signal processor would be used to extract prosody features such as described un [0042] and is well known in the art.) from the spoken utterance;

performing speech recognition on the spoken utterance to generate a recognized word (see Figure 1, steps S12 and [0040] recognize speech)

generating a prosodic mimic word using (Figure 1, step S40 and S50 and [0046], speech synthesis is performed on the input speech by applying prosody

to a given text (see [0003]) and the one or more prosodic parameters (see Figure 1, step S21, prosody parameters are extracted and applied to storage personality pattern as seen in Figure 1, step S30).

However, Marasek does not specifically teach the alignment of the spoken utterance and the synthesized word.

Meredith does disclose the alignment of the spoken utterance to the synthesized speech (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the speech synthesis for an utterance as presented by Marasek by the alignment of the utterance and the synthesized word presented by Meredith. The motivation to have combined the two references includes the improvement in intonation (see Meredith col. 3, lines 5-10).

However, Marasek in view of Meredith do not specifically teach the generation of a nominal word.

Lumelsky does teach synthesizing a nominal word (e.g. The applicant refers to the nominal word as synonymous to synthesized word) corresponding to the recognized word (see col. 13, lines 29-41, synthetic speech is produced based on a pre-stored voice selected by the narrator. Further in col. 16, lines 45-65, the speech that has been output can be reconfigured by editing or changing the prosody parameters.); and

It would have been obvious to one of ordinary skilled in the to art at the time the invention was made to have combined the speech synthesis for an utterance as presented by Marasek in view of Meredith by the generation of a default voice output as taught by Lumelsky. The motivation to have combined the references involves editing or altering of output based on user preference (see Lumelsky, col. 16, lines 42-65).

Marasek in view of Meredith in view of Lumelsky do not specifically disclose the system implemented on a handheld device.

Cameron does disclose the speech synthesis implemented on a handheld device (see page 5, 6<sup>th</sup> paragraph and see page 29, 1<sup>st</sup> paragraph) (e.g. portable is synonymous to handheld and PDA is a handheld device).

It would have been obvious to one of ordinary skilled in the to art at the time the invention was made to have combined the speech synthesis for an utterance as presented by Marasek in view of Meredith in view of Lumelsky by the implementation on a handheld device for the purpose of portability, which allows the user to use the device anywhere as is apparent and seen in navigation and translation devices, which incorporate speech recognition and generate a synthetic speech output based on user selection (see Cameron page 5, last paragraph, example of recognition and voice output is described and page 10, bullet 10-page 11, command recognition and speech synthesis) for minimal hand/eye distraction (see Cameron, page 32, 2<sup>nd</sup> paragraph).

As to claim 2, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above.

Furthermore, Marasek teaches wherein the one or more prosodic parameters include pitch (see [0042], pitch).

As to claim 3, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Marasek teaches wherein the one or more prosodic parameters include timing (see [0042], speech element duration).

As to claim 4, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above.

Furthermore, Marasek teaches wherein the one or more prosodic parameters include energy (see [0042], loudness).

As to claim 6, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Meredith teaches comprising temporally (see col. 4, lines col. 4, lines 37-53) (e.g. The reference indicates the use of intervals and a pitch point marking) aligning phones (see col. 3, line 5) (e.g. Phones are synonymous to phonetic symbols) of the spoken utterance and phones of the nominal word (see Abstract).

As to claim 7, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above

Furthermore, Marasek teaches comprising converting the prosodic mimic word into a corresponding audio signal (see Figure 1, steps S40 and S50 and [0048], synthetic speech is output) (e.g. It is obvious that the signal is in audio form in order for the user to listen to the speech generated).

As to claim 10, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 9, above

Furthermore, Marasek *et al.* discloses wherein the decoder comprises a speech recognition engine (see Figure 1, step S12, and [0014] and [0015]).

As to claim 12, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 9, above

Furthermore, Lumelsky teaches a storage device (see col. 17, line 22, dsp) including executable instructions (see col. 17, line 21) for speech analysis and processing (see col. 17, lines 17-20, dsp).

As to claims 8, 11, and 14, Marasek in view of Meredith in view of Lumelsky in view of Cameron teaches all of the limitations as in claim 1, above



Furthermore, Cameron teaches the use of a portable telephone (see page 5, paragraph 6, line 4) input device (see page 5, paragraph 6, line 1) and the prosodic mimic word (synthesis and presentation of commands to the user) (see Abstract and page 18, paragraph 2, lines 1-8) is provided to a telephone output device (see page 5, paragraph 6, line 2). Further, Cameron discloses the use of a user interface (see Abstract) utilizing a mobile phone (see page 18, line 7 and page 5, paragraph 5, line 4) (e.g. It is inherent that a portable telephone encompasses a mobile telephone).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paras Shah whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-THURS. 7:30a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571)272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. S./  
Examiner, Art Unit 2626

03/11/2008